# Ax61/Ax62-series
## User Guide

**(Ax61D2, Ax61D4, Ax61D8, Ax62D, Ax62V)**

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Please read this guide carefully before you install the dome camera. Keep this guide for future reference.

Ax61/Ax62-series User Guide

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## FCC

This device complies with part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

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# 1. Warnings and operation notes

**Please read this guide carefully before you install the dome camera. Keep this guide for future reference.**

Thank you for purchasing an i3 Ax61/Ax62-series camera.
If the system needs to be modified or repaired, contact a certified i3 International Dealer/Installer. When serviced by unauthorized technician, the system warranty will be voided. Should you have any problems or questions regarding our products, contact your local i3 International Dealer/Installer.

## 1.1 Precautions

**Installation and serving should be performed only by qualified and experienced technicians to conform to all local codes and to maintain your warranty.**

> ⚠ **WARNING! To reduce the risk of fire or electric shock, do not expose the product to rain or moisture.**

When installing your Ax61/Ax62 camera be sure to avoid:

- excessive heat, such as direct sunlight or heating appliances
- contaminants such as dust and smoke
- strong magnetic fields
- sources of powerful electromagnetic radiation such as radios or TV transmitters
- moisture and humidity
- areas with mechanical vibrations
- fluorescent lamps or objects that reflect light
- unstable light sources as this may cause flickering
- temperatures below -10° Celsius or 14° Fahrenheit and above 50° Celsius or 122° Fahrenheit.

## 1.2 Power Supply

Ensure the supplied voltage meets the power consumption requirements of this camera before powering the camera on. Incorrect voltage may cause irreparable damage to the video camera and will effectively void the camera warranty.

PoE power is supported in the indoor (Ax61/Ax62D-series) and outdoor (Ax62V) installations.

### 1.3 Cleaning

- For maximum optical clarity, the camera or lens must remain clean. Use a soft, dry cloth to remove finger prints and dust from the dome cover.
- Use a blower to remove dust from the lens.
- Clean the body with a soft, dry cloth. If it is very dirty, use a cloth dampened with a small quantity of neutral detergent, then wipe dry.
- Do not use volatile solvents such as alcohol, benzene, or thinners, as they may damage the surface finish.

### 1.4 Servicing

To avoid electrical shock and to preserve the product warranty, DO NOT disassemble the camera. Refer servicing to qualified personnel only.

## 2. Unpacking

Check that the items received match those listed on the order form and packing slip. In addition to this manual and a fully assembled camera, the dome camera packing box includes:

*(All Ax61/Ax62 series)*

1. User Manual CD x1
2. Guide Pattern sticker x1
3. Flush Mount template (the box lining) x1
4. Hex key x1
5. Plastic Anchor x4
6. Standard RJ45 Connector x1
7. Short RJ45 Connector x1
8. 2nd video monitor output BNC cable x1

*(Ax61D/Ax62D series only)*

9. Flat Head Screw (Tapping Type) x4
10. Flat Head Screw (Machine Type 26L) x3
11. Rubber plug x8
12. NPT 1/2" Rubber x1
13. NPT 3/4" Rubber x1

*(Ax62V series only)*

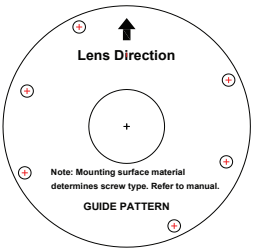
14. Round Head Screw (Tapping Type) x4
15. O-rings x4
16. Rubber gasket x1
17. Desiccant in a package x1

If any parts are missing or damaged, contact the dealer you purchased the camera from.

# Accessories (*not to scale*)

## All Ax61/Ax62 series

1

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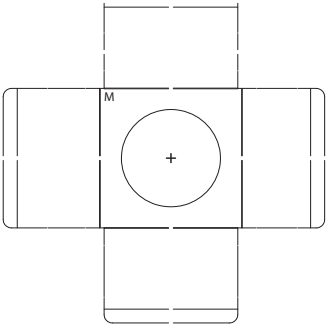


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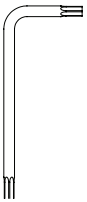

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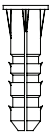

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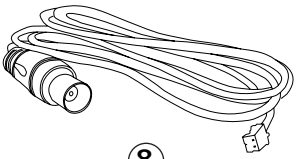

8

## Ax61D/Ax62D series only

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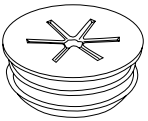

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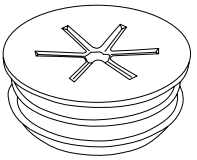

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## Ax62V series only

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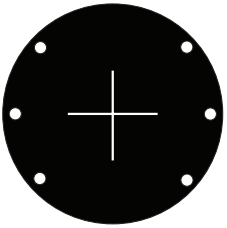

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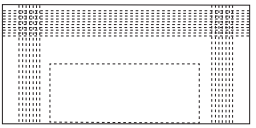


17

# 3. Installation

The dome camera is ideal for indoor (Ax61D/Ax62D) and outdoor installation (Ax62V) in commercial and residential environment. With 3-axis mount support, it provides flexible installation on a ceiling or wall even at an angle. The dome camera is a fully integrated enclosure with camera and lens.

**Note:** The six holes on top of the Ax62V-series models are not drilled all the way through for moisture control and the rubber corks are replaced with metal caps with rubber washers.

### 3.1 Dimensions

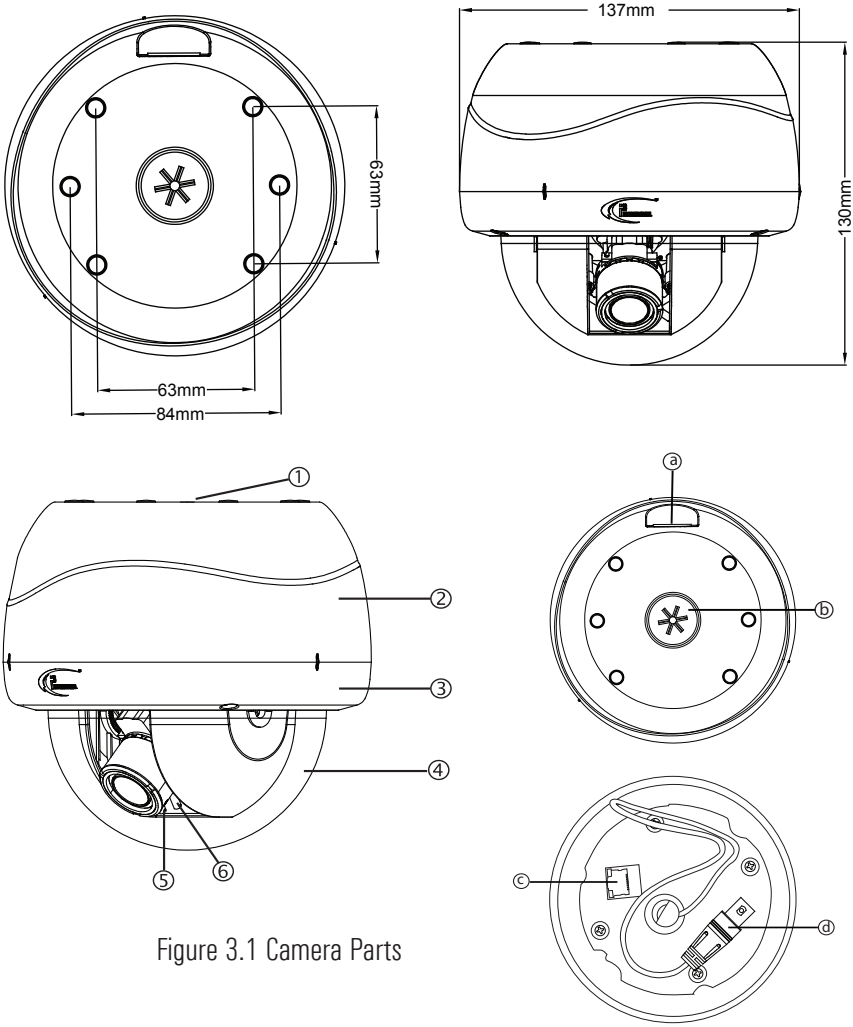



Figure 3.1 Camera Parts

**Figure 3-1**

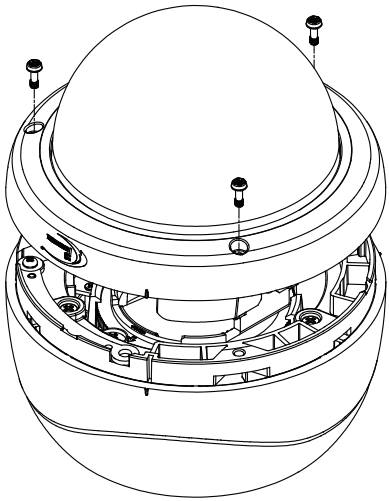
1. Camera dome, top view
    a. Side conduit hole (1/2").
    When using outdoors (Ax62V only), sealant must be used to maintain the IP67 status.
    b. Top conduit hole (3/4") (can also be used for pendant mount).
    When using outdoors (Ax62V only), sealant must be used to maintain the IP67 status.
    c. PoE connector (Bottom case must be removed to reveal connector)
    d. Video output connector (Bottom case must be removed to reveal connector)
2. Bottom case
3. Camera base
4. Dome cover
5. Focus lever (Ax62-series only)
6. Zoom lever (Ax62-series only)

### 3.2 Routine Maintenance

- The dome cover is an optical part. Use a soft and dry cloth to remove any fingerprints and dust.
- Clean the camera housing with a soft and dry cloth. For more stubborn marks, use a cloth dampened with a small quantity of neutral detergent, then wipe dry.
- **CAUTION: Do not use volatile solvents such as alcohol, benzene or thinners, as they may damage the surface finish.**

### 3.3 Disassembling the Camera

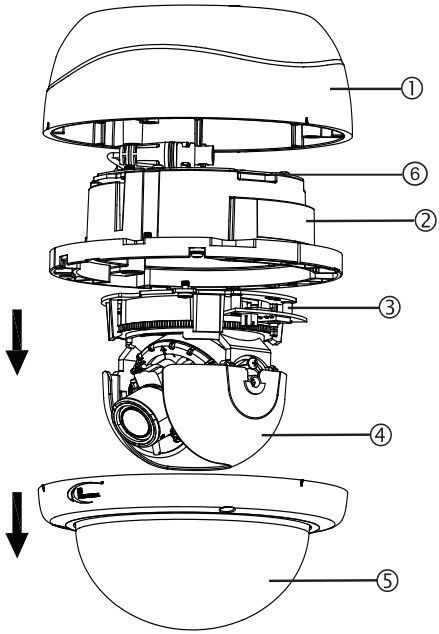
Before you mount and adjust the camera, follow these steps to disassemble the camera.



1. Use a Hex key to remove the dome cover.

Figure 3.2 Disassembling the camera

2. Loosen the 3 screws on camera base (#2).




1. Bottom case
2. Camera base
3. Tilt adjustment bracket
4. Inner liner
5. Dome cover
6. Anti drop hook

Figure 3.3 Disassembling the camera

### 3.4 Attaching the Desiccant (Ax62V models only)

1. Take the desiccant out of the package (#17 on Accessories list on page 5)
2. On the inside of the inner liner, peel the protective layer on the adhesive strip revealing the adhesive surface. Attach the desiccant as shown in the diagram below.

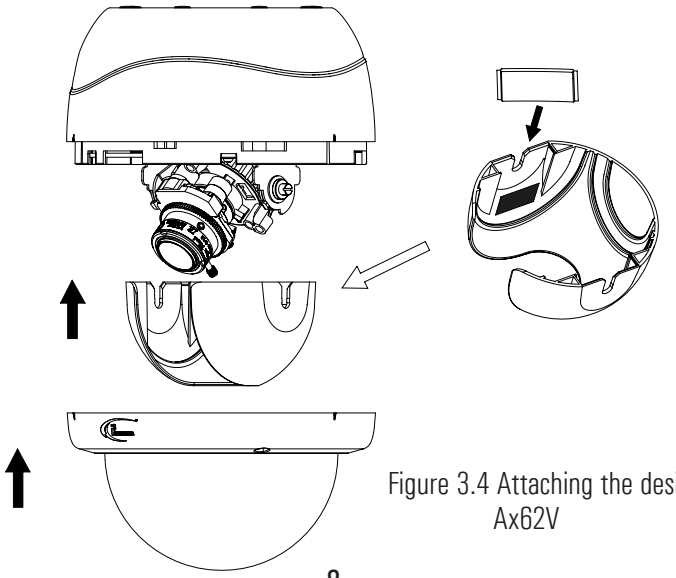


Figure 3.4 Attaching the desiccant to Ax62V

### 3.5 Connecting the wiring

Follow Figure 3.1 to connect the video output connector (d), connect the PoE connector (c).

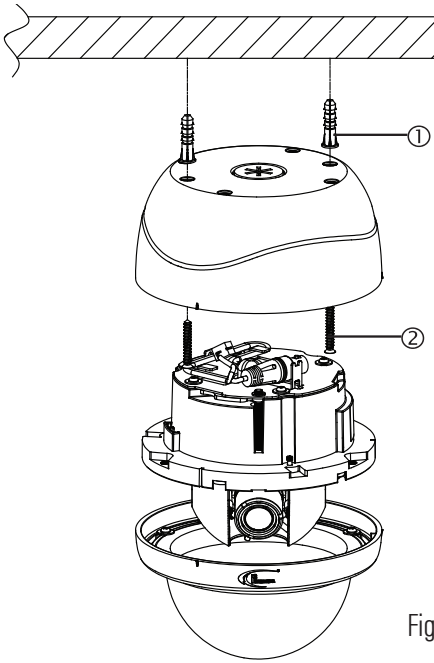
### 3.6 Mounting the Camera

The following section explains how to install either a surface mount (3.5.1) or flush mount. Select the mount appropriate to your application.

#### 3.6.1 Surface mount

1. Attach the Guide Pattern Sticker to the wall or ceiling.
2. Drill four holes on the mounting surface and insert the plastic anchors (#1 in the image below) into the holes.
3. Ax62V-series only: Complete drilling 4 holes on the base of the camera to match the 4 holes drilled on the mounting surface.
   (Recommendation: Surface conduit should point down to create a drip-loop.)
4. Ax62V-series only: After using it as a template for marking the mounting holes, remove the protective film from the black rubber gasket and adhere to the base of the outdoor model cameras.
5. Secure the bottom case to the wall or ceiling with the Flat Head Screws (tapping type) (#2 in the image below).
   For your convenience, the holes on the outdoor housing are started but not drilled all the way through for moisture control.

Note: Depending on the material of your mounting surface, you may require different screws and anchors than those supplied.



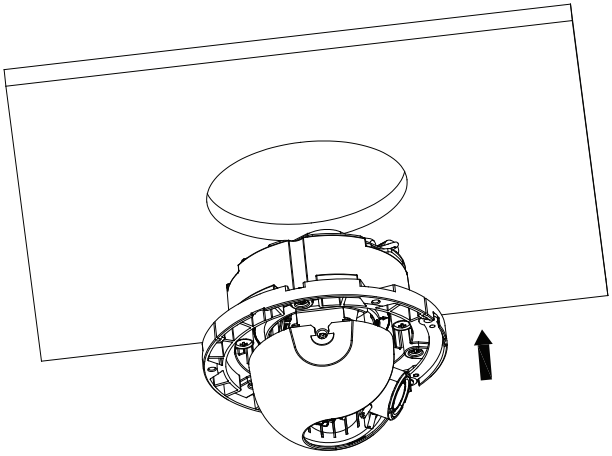

1. Plastic Anchors
2. Flat Head Screws (Tapping Type)
   Note: outdoor screws come with O-rings included.

Note: The Ax62V-series cameras come with a large rubber gasket to provide the seal between the mounting surface and the camera base.

Figure 3.5 Camera Surface Mounting

### 3.6.2 Flush mount (Indoor installations only)

1. Prepare the mounting surface.
   Use the Mounting Template (#3 on Accessories list on page 5) to cut a hole into the mounting surface.
2. Remove the bottom case of the camera. (Refer to Figure 3.2 on page 7)
3. Insert camera into the hole



4. Turn screws (1) clockwise to adjust the wing tabs. Tighten the tabs securely against the surface.

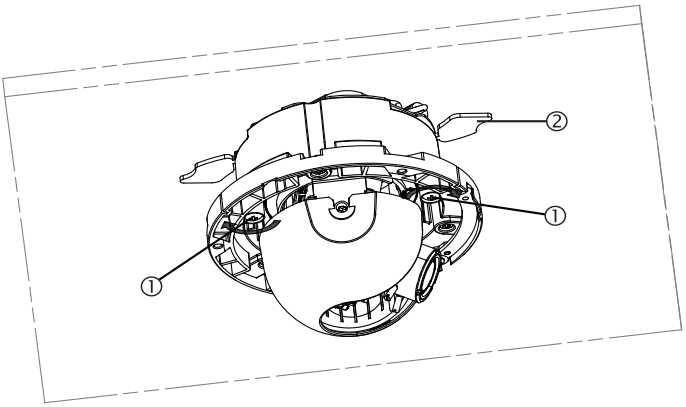



Figure 3.6 Camera Flush Mounting

1. Wing Tab Adjustment Screws (2 silver screws)
2. Wing Tabs

### 3.6.3 Flush Mount Using Back Box

1. Prepare the mounting surface. Use the Mounting Template to cut a hole into the mounting surface.
2. Remove the bottom case of the camera. (Refer to Figure 3.2) and attach to ¾" NPT pipe (EMT or Rigid) ensuring the back box is flush with the T-bar tile.
3. Insert camera into the hole and attach anti drop hook cable if required. Secure the bottom case to the wall or ceiling with the Flat Head Screws (tapping type).
4. Remove shorter black screws, fasten camera to back box with supplied longer screws (#10 on Accessories list on page 5).

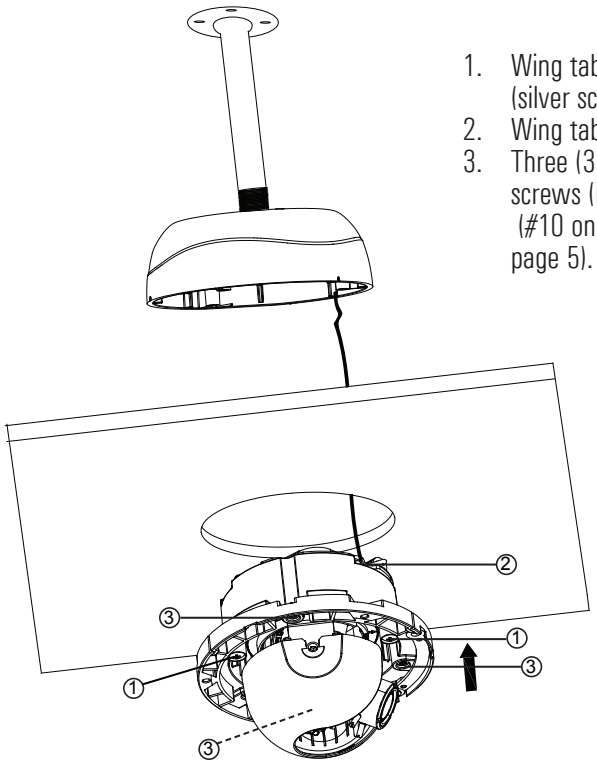



Figure 3.7 Camera Flush Mounting using Back Box

# 4. Camera Adjustments

## 4.1 Adjusting the Camera Position

The dome camera has three axis for positioning the camera. While live viewing on the monitor, adjust the camera position as follows:

- Horizontal adjustment rotates 3D assembly in the base.
- Vertical adjustment: After loosening the screw on the bracket, position the camera as desired, and tighten the screw back to the bracket.
- Horizontal rotation for wall mount and tilted ceilings: rotate the lens base (maximum 354°) until you are satisfied with the field of view.

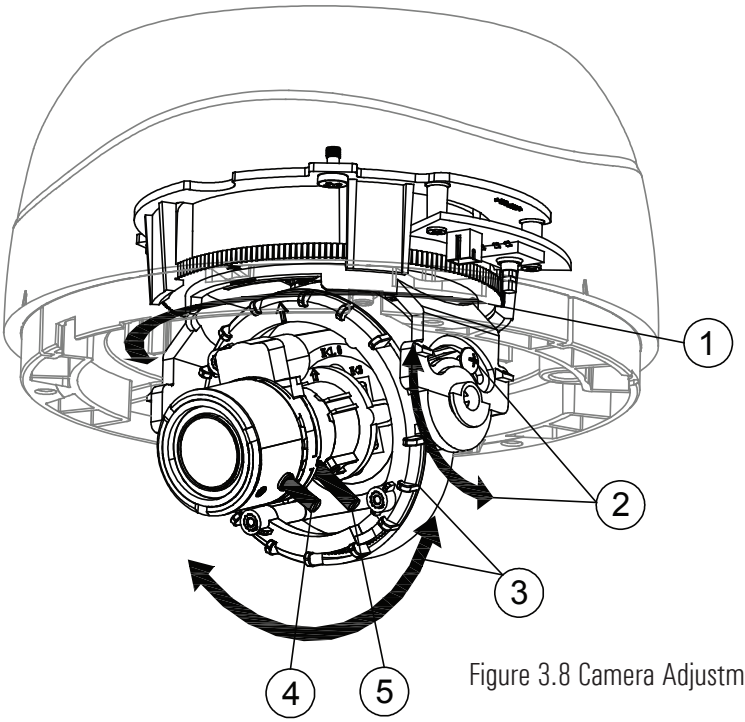



Figure 3.8 Camera Adjustment

1. Rotate 3D assembly in base for horizontal adjustment
2. Loosen screw and adjust Tilt. Tighten screw when desired vertical angle is achieved.
3. Turn axis ring for horizontal rotation.
4. Focus lever
5. Zoom lever

## 4.2 Adjusting the Lens

1. Loosen the focus lever (#4 on Fig. 3.8) counter-clockwise a little and adjust for optimum picture sharpness.
2. Loosen the zoom lever (#5 on Fig. 3.8) counter-clockwise a little and rotate to determine the image view.
3. Re-tighten the zoom lever and focus lever after adjustment.
   **Please note:** It is important that you lock the zoom and focus levers after making adjustments. This will avoid the positions moving (for example, from temperature changes or vibrations).
4. Once all adjustments are done, attach and secure the camera housing:
   a. Use a soft and lint-free cloth to wipe the dome cover and remove fingerprints.
   b. Attach the inner liner (#3) to the tilt adjustment bracket (#2). Push down until it clicks into place.
   c. Assemble the dome cover (#4) and the camera base (#1).

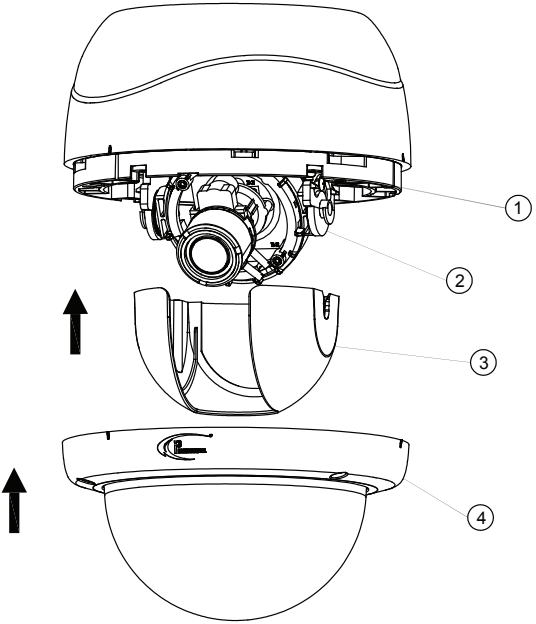
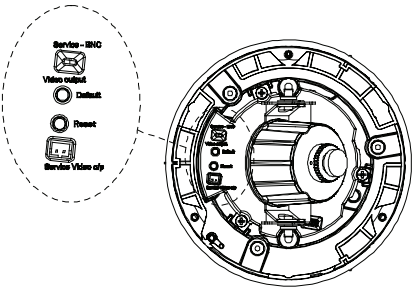



Figure 3.9 Adjusting the lens

## 4.3 Camera Control Panel

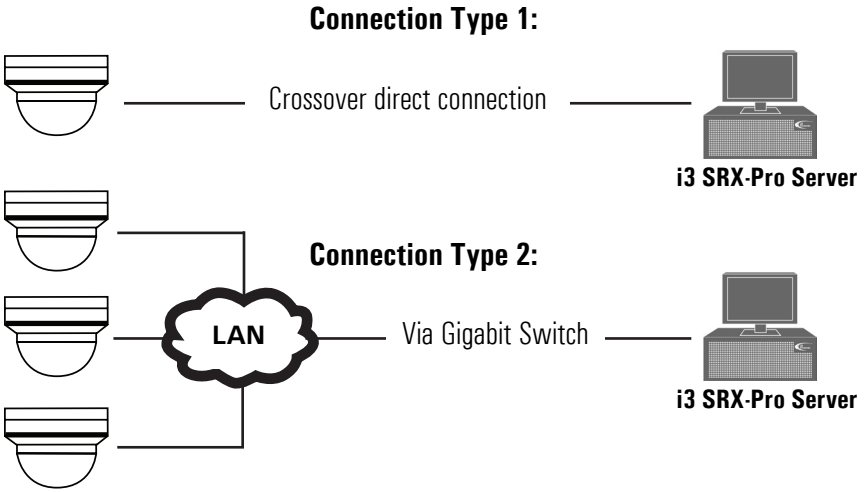
Control Panel is located under the dome cover. Remove inner liner for easier access.

1. **Service-BNC Video Output Selection Switch:** Switch to "**Service"** for Service Port video output; switch to "**BNC"** to display video from the camera's BNC port. The default setting is "Service".
2. **Default:** To reset all camera's settings to factory default, press and hold for 5 seconds.
3. **Reset:** Press to reboot the camera.
4. **Service Video o/p:** For monitor output. Use the BNC cable provided with the camera's accessories.



# 5. Connecting your IP Camera to the SRX-Pro Server

## 5.1 Camera Connection Options




## 5.2 Hardware/Software Requirements

The following requirements must be met to achieve a successful network connection with the Ax61/Ax62-series IP camera.

SRX-Pro Server:

- i3 SRX-Pro Version 3.0 or higher
- Latest GiPi adapter is installed. GiPi adapters can be downloaded from i3 FTP website. (Please contact i3 Technical Support for more information.)
- Windows XP, XPe, 7 Pro or 7e
- **Internet Explorer Version 8.0 or later**
- CPU: Intel Pentium Core 2 or higher
- Memory: 1GB or more
- VGA card--supporting Direct X 9.0 or above

Power Supply

PoE power is supported in the indoor (Ax61/Ax62D-series) and outdoor (Ax62V) installations.

**Note: Camera damages resulted from improper power application are NOT covered by the camera warranty.**

Switch

A Gigabit Switch is required to monitor two or more cameras from the same SRX-Pro Server.

### 5.3 Configuring Internet Explorer for Video Display

Your Internet Explorer (v.8.0 or higher) must first be configured in order to properly display video stream from your Annexxus camera.

Follow these instructions to configure your Internet Explorer browser.

***Enable Cookies***

1. In Internet Explorer window, click **Tools** -> **Internet Options**
2. Open **Privacy** tab, move the slider to "Low" or "Accept All Cookies"
3. Click **Apply**. Do not close the Internet Options window.

***Adjust Internet Security Settings***

1. Open **Security** tab in the Internet Options window
2. If the camera operates inside of the Intranet, click the Intranet icon;
   If the camera operates outside outside of the Intranet, click the Internet icon.
3. Click **Custom Level**. Security Settings - Internet Zone window will be displayed.
4. Scroll down to the **ActiveX controls and plug-ins** radio buttons and configure as follows:
   - » Automatic prompting for ActiveX controls -> **Enable**
   - » Download signed ActiveX controls -> **Prompt** (recommended)
   - » Download unsigned ActiveX controls -> **Prompt**
   - » Initialize and script ActiveX not marked as safe for scripting -> **Prompt**
   - » Run ActiveX controls and plug-ins -> **Enable**
   - » Script ActiveX controls marked safe for scripting -> **Enable**
5. Click **OK** to save the Internet Security Settings
6. Close all Microsoft Internet Explorer Windows and open a new IE window. This will allow the new settings to take effect.

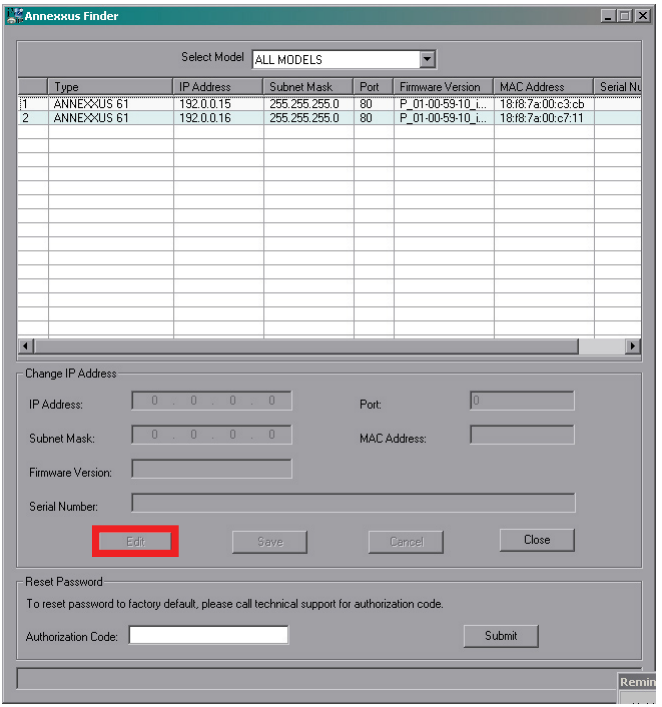
### 5.4 Using Annexxus Finder to assign IP Address to your IP Camera

| Camera's default IP address is **192.0.0.16**<br>Camera's default subnet mask address is **255.255.255.0**. |
|---|

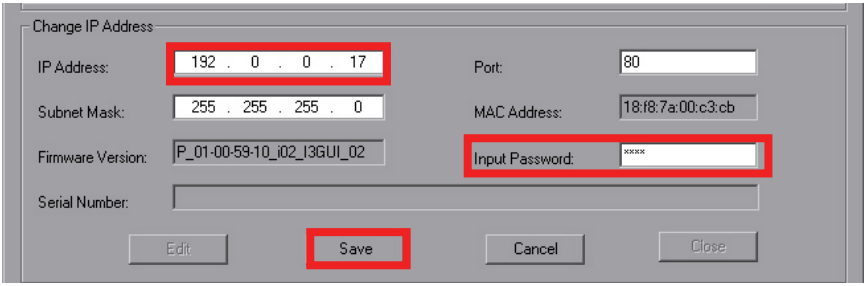
| Firmware Version | Default Login | Defaul Password |
|---|---|---|
| i3_00_026-40 | admin | 1234 |
| i3_00_39-51, or higher | i3admin | i3admin |

To connect your Annexxus camera to your SRX-Pro Server, follow these instructions:

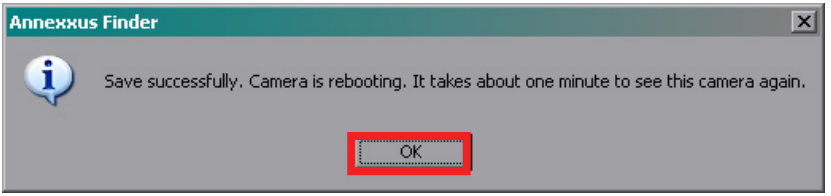
1. Close SRX-Pro Server software by pressing **Alt+Shift+Ctrl+F4**.
2. Change the IP address on the onboard NIC (LAN) (or on NIC1 if your SRX-Pro Server has two onboard NIC cards) of your SRX-Pro Server to **192.0.0.XXX** to match the default IP range of your Annexxus IP camera.
3. Connect the network cable from the SRX-Pro Server (crossover direct connection) or from the Gigabit switch to your Annexxus camera.
4. Turn on your Annexxus camera.
5. Locate the CD that came with your Annexxus camera and insert it in the CD-ROM drive of your SRX-Pro Server.
6. Double-click "AnnexxusFinder.exe" file to install Annexxus Finder application. Annexxus Finder application discovers all Annexxus cameras connected to your network.
7. Follow the Annexxus Finder installation instructions until the application has been successfully installed on your SRX-Pro Server.
8. Double-click Annexxus Finder icon on the Desktop to launch the application. The application window will appear displaying a list of active network cameras
9. Next, select desired camera in the Annexxus Finder software by double-clicking it in the list and click **Edit**.



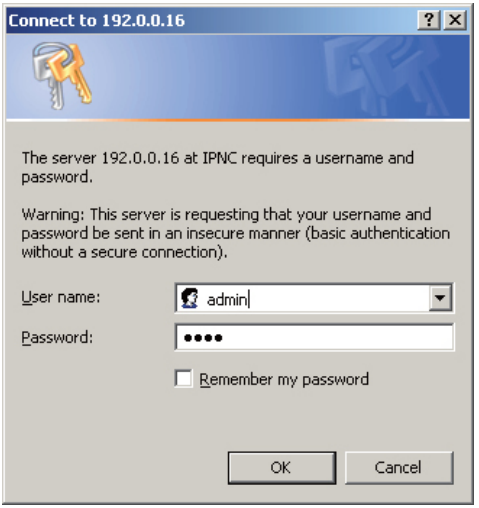

10. Enter the new IP address and Subnet Mask of the camera in the ***Change IP Address*** area. The new camera IP address must match the original range of your SRX-Pro LAN or NIC1 card. E.g. If your original SRX-Pro Server's IP address was 192.138.10.122, change your Annexxus camera's IP address to 192.138.10.XXX.
*Remember: Annexxus Cameras cannot share an IP address, each camera requires its own unique IP address.*
11. Enter the default camera password in the Input Password field and click **Save**



12. Wait a few moments as the new IP address is being applied to your Annexxus camera. Wait for the following message to be displayed. Click **OK** to close it.



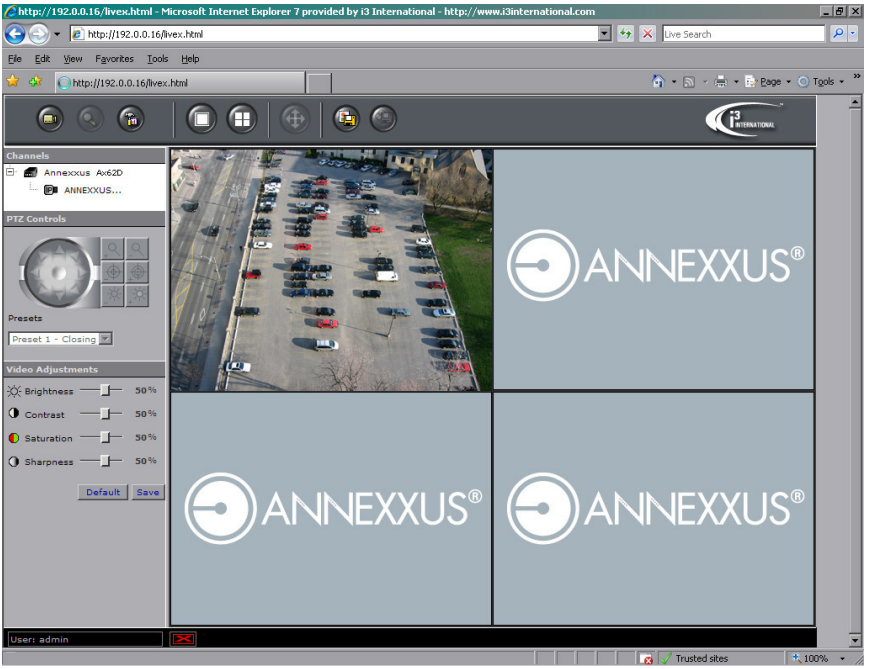

13. Repeat Steps 1-12 for all detected Annexxus cameras in the Annexxus Finder.
14. Now that the new IP address has been successfully assigned to your camera, make sure you can connect to it through the Internet Explorer:
15. Launch Internet Explorer on your SRX-Pro Server and enter the IP Address you have just assigned to your Annexxus camera. The password window should be displayed.
16. Enter the default camera User Name and default Password and click **OK**.


Connect to 192.0.0.16
The server 192.0.0.16 at IPNC requires a username and password.
Warning: This server is requesting that your username and password be sent in an insecure manner (basic authentication without a secure connection).
User name:
admin
Password:
Remember my password
OK
Cancel

**Default Login/Password:**
FW ver. i3_00_026-40
Login: **admin** / PW: **1234**

FW ver. i3_00_39-51, or higher,
Login: **i3admin**
Password: **i3admin**

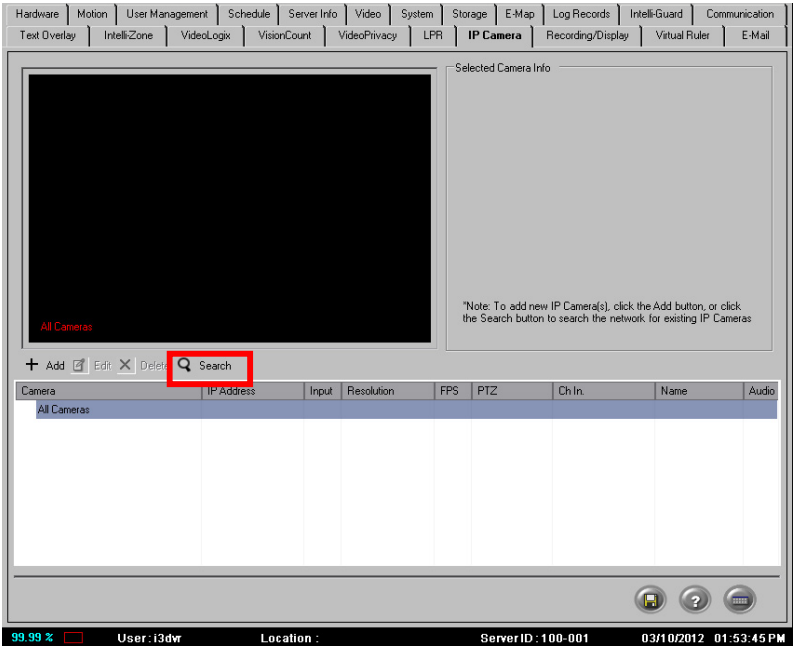
17. Annexxus camera interface will be displayed in the Internet Explorer window. You should be able to see the camera image on the screen.
    If you do not see the camera image on the screen, call i3 International tech support for help.



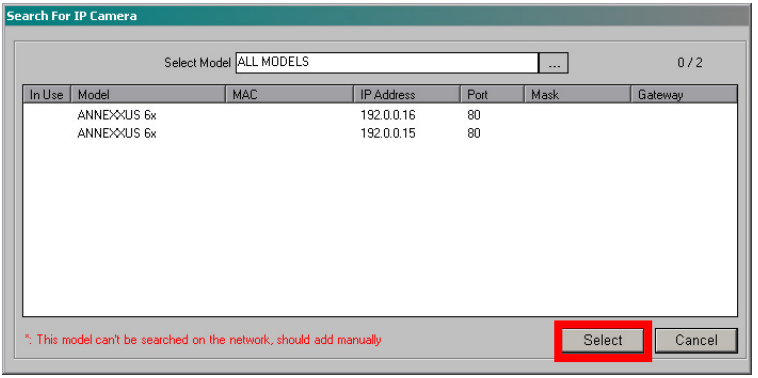

## 5.5 Adding your IP Camera to your SRX-Pro Server

1. Make sure that the latest version of GiPi updater is installed on your SRX-Pro Server. You can download the updates from
   ftp://ftp.i3international.com/drivers/gipi
   Please contact i3 Technical Support team for access information.
2. Once the latest GiPi updater has been installed, restart i3 SRX-Pro Server software.

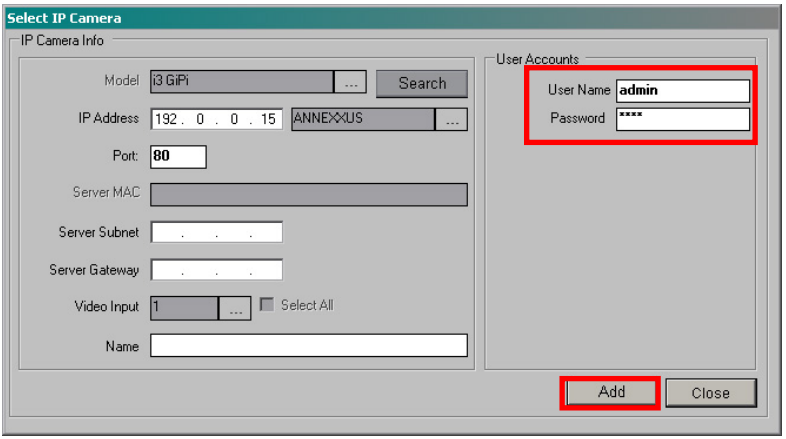
3. Log In and go to the Setup -> IP Camera tab.




4. Click the **Search** button to display connected Annexxus cameras.

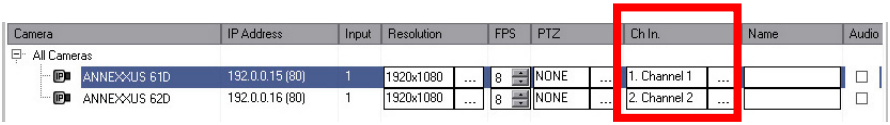


5. Select the detected camera in the list and click **Select**.
6. In the *Select IP Camera* window, enter the default camera User Name and the default Password, then click **Add.**



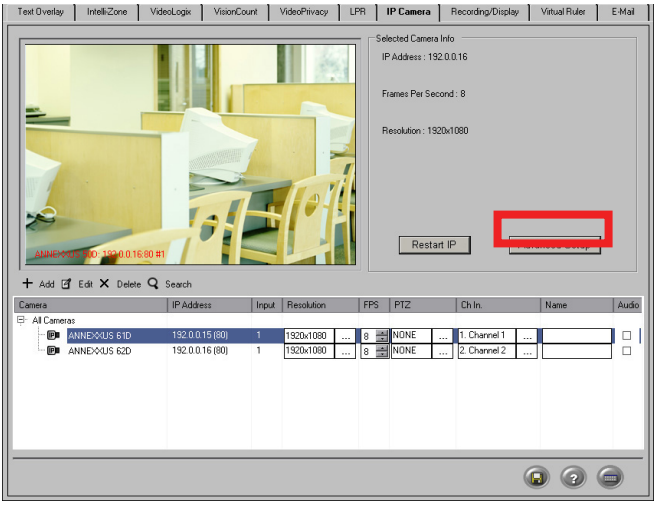

**Default Login/Password:**
FW ver. i3_00_026-40 | Login: **admin** / PW: **1234**
FW ver. i3_00_39-51, or higher | Login: **i3admin** / PW: **i3admin**

7. The selected camera will be added to the IP Camera list.
   Don't forget to assign the IP camera to the SRX-Pro video channel in the Your Annexxus camera is now connected to SRX-Pro Server and is ready to record. You may change resolution and frame rate for the Annexxus camera in the *IP Camera* tab menu or you may choose to configure the camera's advanced settings (see the following section).



# 6. Advanced Camera Setup

To access Annexxus camera's advanced setup, go to Setup -> IP Camera tab, select the camera in the list of added IP cameras and click the **Advanced Setup** button.

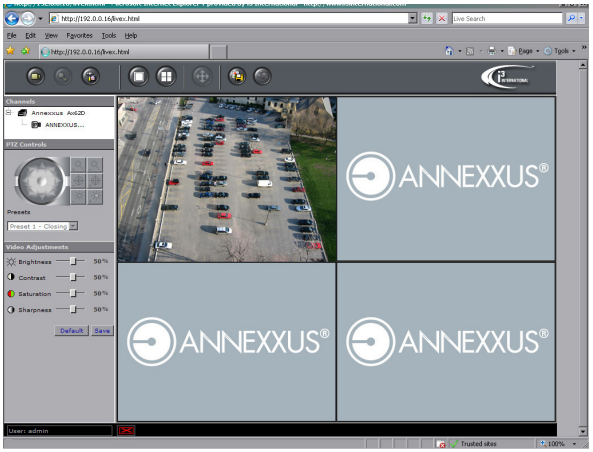


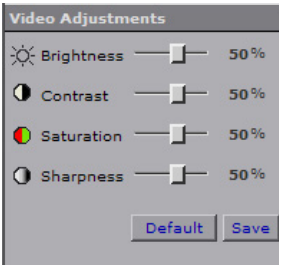

The password window will be displayed. Enter the default camera User Name and the default Password. Camera's user interface will be displayed in a separate Internet Explorer window.

**Default Login/Password:**

FW ver. i3_00_026-40 | Login: **admin** / PW: **1234**

FW ver. i3_00_39-51, or higher | Login: **i3admin** / PW: **i3admin**






In the main interface, you may adjust your camera's Brightness, Contrast, Saturation and Sharpness levels.

Click **Save** to save adjusted settings or **Default** to set all settings back to 50%.

**Note:** This panel is enabled in the Live View mode only and is disabled when in the Setup mode.

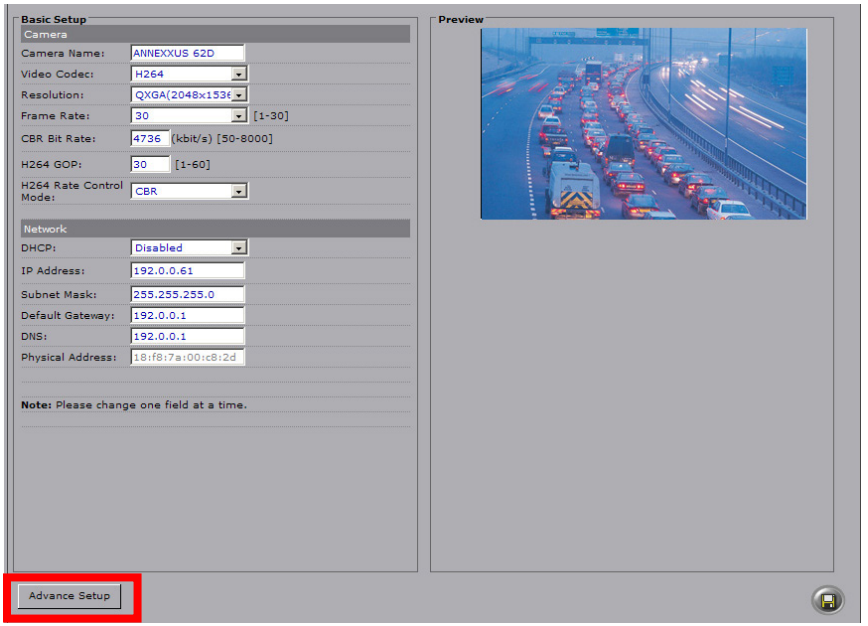
Next, click the Setup button to access Annexxus camera Setup features.

## 6.1 Basic Setup

You may switch to the advanced setup at any time by clicking the button in the bottom left-hand corner. To switch back to the Basic Setup, click the same button again.

Basic Setup is divided into Camera and Network settings.

After making any setting adjustments, remember to click the **Save** button



***Camera Settings:***

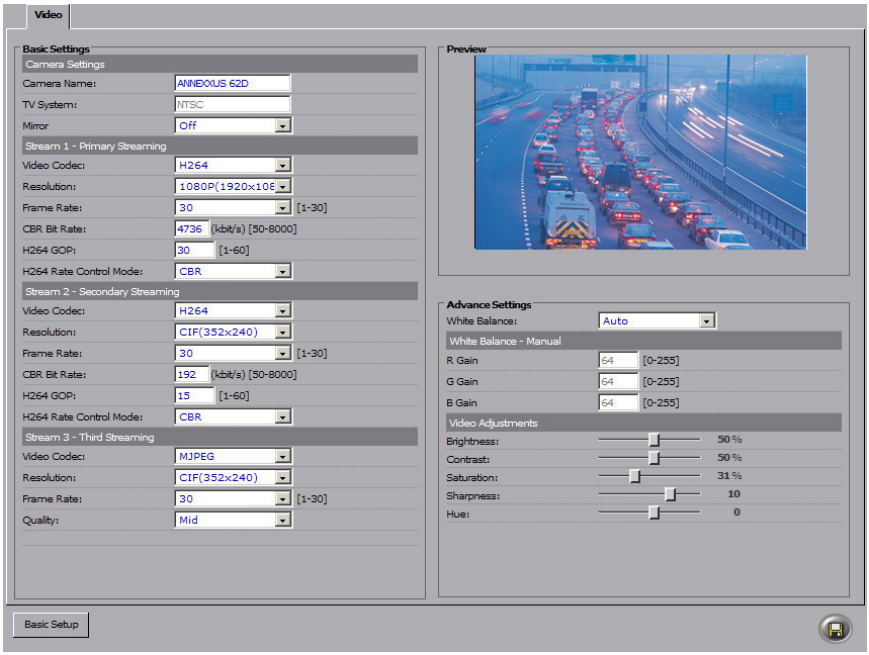
- Camera Name: The name of the camera will be displayed at the top of the Internet browser page.
- Video Codec: Set the compression mode to MJPEG or H264
- Resolution: Set the resolution of the recorded video to D1, SVGA, 720P, SXVGA 1080P (full HD)-recommended, 2304x1296, or QXGA (2048x1536).
- Frame Rate: Set the frame rate for the recorded video to 1, 3, 7.5, 15, or 30 fps-recommended (unavailable with 2304 x 1296 and QXGA resolutions)
- Bit Rate (for H264 codec): Set the video bit rate from 50-8000 kbit/s
- H264 GOP (for H264 codec): Set the GOP rate from 1-60. The lower the number, the lower the compression the larger the video size. The higher the number, the higher the compression and the smaller the video size. GOP rate determines the i-Frame frequency.
- H264 Rate Control Mode (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate).
    - » VBR (Variable Bit Rate) (recommended): This setting will produce a variable bit rate video stream, however the video quality will remain constant resulting in high quality video images. Network infrastructure must be able to provide the set bandwidth to account for bit rate variations.
    - » CBR (Constant Bit Rate): This setting will produce a constant bit rate video stream at the cost of video quality. The quality may deteriorate considerably when motion is detected. This setting is beneficial for installations with limited bandwidth.
- Quality (for MJPEG codec only): HIGH, MID, LOW

***Network settings:***

- DHCP: Enable or Disable to have the network automatically assign an IP address to the camera.
- IP Address: Manually enter the camera's IP address here.
  This option should NOT be used if DHCP is enabled.
- Subnet Mask: Manually enter the camera's Subnet Mask here.
  This option should NOT be used if DHCP is enabled.
- Default Gateway: Provide the IP address of the network's router if necessary.
  Contact your network administrator for this information.
- DNS: Specify a DNS if necessary.
  Contact your network administrator for this information.
- Physical Address: This is the camera's unique MAC Address. It may not be changed.

## 6.2 Video Setup

Switch to the Advanced Setup by clicking the **Advance Setup** button on the bottom left-hand corner of the screen as shown on the previous page. The Setup screen will change to reveal multiple setup tabs. Video Setup tab is displayed by default.




### *Camera Settings:*

- Camera Name: The name of the camera will be displayed at the top of the Internet browser page.
- TV System: NTSC or PAL. To change the setting, access System setup tab.
- Mirror: Flips the video image. The options for mirror are:
  - » OFF: Do not use this feature
  - » FLIP: flip images vertically, upside-down.
  - » MIRROR: flip images horizonrally, left to right.
  - » BOTH: flip both horizontally and vertically.

Annexxus 61/62 camera series supports triple streaming, where Primary Streaming is the default stream used for video recording and Third Streaming is used for Live Viewing. Each stream can be configured separately.

**Note: Enabling Streams 2 and 3 may cause frames being dropped on Stream 1.**

***Configure Stream 1 - Primary Streaming (Recorded Video):***

- Video Codec: Set the compression mode to H264 or MJPEG
- Resolution: Set the resolution of the recorded video to one of the following:
  - » D1 (720 × 480)
  - » SVGA (800 × 600)
  - » 720P (1280 × 720)
  - » SXGA (1280 × 960)
  - » 1080P (1920 × 1080 - full HD) - recommended
  - » 2304 x 1296
  - » QXGA (2048 x 1536)

    Note that when the Resolution on the Primary Streaming is set to QXGA or 2304 x 1296, and Third streaming will be disabled. When the Resolution on the Primary Streaming is set to 1080P, Third streaming is disabled.
- Frame Rate: Set the frame rate for the recorded video to 1, 3, 7.5, 10, 15 (available only with 1080P resolution), or 30 fps - recommended (unavailable with 1080P resolution)
- Bit Rate (for H264 codec): Set the video bit rate from 50-8000 kbit/s
- H264 GOP (for H264 codec): Set the GOP rate from 1-60. The lower the number, the lower the compression the larger the video size. The higher the number, the higher the compression and the smaller the video size. GOP rate determines the i-Frame frequency.
- H264 Rate Control Mode (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate). See p. 24 for details.
- Quality (for MJPEG codec only): HIGH, MID, LOW

***Configure Stream 2 - Secondary Streaming:***

***Note: Unavailable with 2304x1296 and QXGA resolutions.***

- Video Codec: Set the compression mode to H264 or MJPEG
- Resolution: Set the resolution. The list of available resolutions will depend on the resolution of the Primary Streaming. Set the Resolution to "None" to disable Secondary Streaming.
- Frame Rate: Set the frame rate for the recorded video to 1, 3, 7.5, 15 or 30 fps
- Bit Rate (for H264 codec): Set the video bit rate from 50-8000 kbit/s
- H264 GOP (for H264 codec): Set the GOP rate from 1-60. (Same as Primary)
- H264 Rate Control Mode (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate). See p. 24 for details.
- Quality (for MJPEG codec only): HIGH, MID, LOW

***Configure Stream 3 - Third Streaming (Live View):***
***Note: Unavailable with 1080P, 2304x1296 and QXGA resolutions.***

- Video Codec: Set the compression mode to H264 or MJPEG
- Resolution: Set the resolution. The list of available resolutions will depend on the resolution of the Primary and Secondary Streaming. Set the Resolution to "None" to disable Third Streaming.
- Frame Rate: Set the frame rate for the recorded video to 1, 3, 7.5, 15 or 30 fps
- Bit Rate (for H264 codec): Set the video bit rate from 50-8000 kbit/s
- H264 GOP (for H264 codec): Set the GOP rate from 1-60. (Same as Primary)
- H264 Rate Control Mode (for H264 codec): VBR (Variable Bit Rate) or CBR (Constant Bit Rate). See p. 24 for details.
- Quality (for MJPEG codec only): HIGH, MID, LOW

***Advance Settings:***

- White Balance: Set White Balance mode to **Auto** or **Manual** according to the image's lighting conditions for the best color temperature.
- R Gain, G Gain, B Gain (Use when White Balance is set to Manual):
  Adjust levels of red, green and blue in the image.
  Values can be set from 0-255
- Brightness: adjust the image brightness level, Values range from 0% to 100%.
- Contrast: adjust the image contrast level. Values range from 0% to 100%.
- Saturation: adjust the image saturation level. Values range from 0% to 100%.
- Sharpness: adjust the image sharpness level. Values range from 0 to 15.
- Hue: adjust the image hue. Values range from 0 to 15.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

## 6.3 Alarm/Motion (optional)

- Motion Detection: Enable or Disable Motion Detection
- Sensitivity: When Enabled, set the Motion Sensitivity to HIGH, MEDIUM, LOW
- Set Motion. Wait for the static image, then click Set Motion button. Any change to the current static image will be recognized as motion.

## 6.4 Privacy Zone (optional)

In the Privacy Zone setup tab, select an area that needs to be blocked off with a rectangle on Live View and from video recording because of privacy or other concerns. Up to 5 separate Privacy Zones can be configured.

Color Setting: Select between BLACK, GREY and WHITE to determine what color will be used to block out the configured privacy zone.

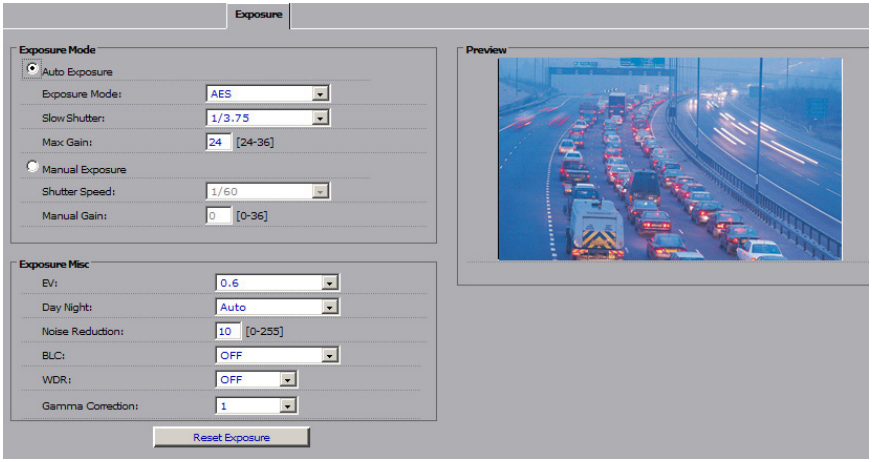
*To draw the privacy zone, follow these instructions:*

1. Set the Privacy Zone Enable to **ON** to activate a privacy zone.
2. Position your mouse cursor over the Preview window, press and hold the left mouse button.
3. While holding down the left mouse button, drag the cursor to draw a rectangular area over the zone that needs to be concealed.
4. Release the mouse button. The privacy area rectangle will be shaded blue in the Preview window.
5. If you are not satisfied with the size or positioning of the privacy zone, repeat steps 2-4 to re-draw it.
6. Click the **Apply** button
7. Repeat Steps 1-6 for additional Privacy Zones, if using.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

## 6.5 Exposure

Set the exposure level for your camera. Exposure time determines how much light passes through the camera aperture to the focus.



***Auto Exposure:*** Select this option to correct the exposure automatically.

- Exposure Mode: Set exposure mode to AES, ALC (*Ax62D only*) or Flickerless (*Ax62D only*).
- Slow Shutter: Set the shutter speed. Acceptable value range is from 1/30 to 1/3.75 sec. Select OFF to disable the feature.
- Max Gain: Set the maximum gain value. The higher value will enhance the video signal. Note that the noise will also be enhanced. Values range from 24 to 36.

***Manual Exposure:*** Select this option to correct the exposure manually.

- Shutter Speed: Set the shutter speed. Acceptable value range is from 1/8000 to 1/60 sec.
- Manual Gain: Set the Manual Gain value. The values range from 0 to 36

***Exposure Misc:***

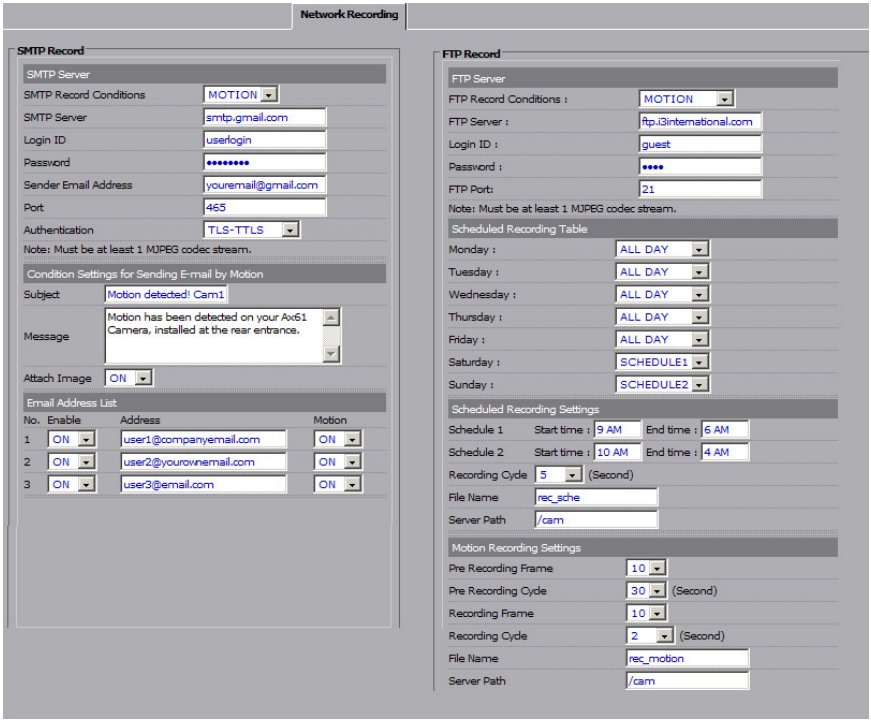
- EV: Set exposure value between -2 and 2. Higher values produce brighter images.
- Day Night: Set the Day/Night setting to AUTO, COLOR or BW
- Noise Reduction: Set the Noise Reduction value. The values range from 0 to 255.
- BLC: When parts of the environment are poorly lit, BLC can be configured to compensate for inadequate lighting conditions. To configure the individual areas that will receive compensation, select one of the available options: UPPER 2 3rds, LOWER 2 3rds, CENTER 1 3rd, CENTER 1 6th, LEFT, RIGHT, or FULL. Enabled areas will be shaded in the Preview screen.
- WDR: Set the Wide Dynamic Range Level if desired. The WDR can be turned OFF, or set to HIGH, MIDDLE or LOW.
- Gamma Correction: Gamma Correction can be set to 0.45 or to 1.
- Reset Exposure: Click this button to restore camera default exposure values.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

## 6.6 Network Recording

Under Network Recording tab, Ax61/62 series camera can be configured to send out an email alert every time motion is detected. It can also record video to a configured FTP server based on motion or on pre-set schedule.

**Note:** Only MJPEG video streams can be used with SMTP & FTP recording options. To set the video stream to MJPEG Video Codec, see Video setup tab.




### *SMTP Server:*

- SMTP Record Condition: Set to MOTION to enable this setting.
- SMTP Server: Enter the SMTP Email Server address
- Login ID: Enter your SMTP Email Server login
- Password: Enter your SMTP Email Server password
- Sender Email Address: Enter your email address
- Port: Enter the SMTP Server port
- Authentication: Select the SMTP Server's authentication type from NO AUTHENTICATION, SMTP PLAIN, LOGIN and TLS-TTLS

***Condition Settings for Sending E-mail by Motion:***

- Subject: Enter the email subject
- Message: Enter the body of the email message
- Attach Image: Set to ON to attach a snapshot to the motion-triggered email

***Email Address List:***

- Configure up to three separate email reciepients. Set Enable and Motion settings to ON and enter the email address for each of the reciepients in the corresponding field.

***FTP Server:***

- FTP Record Conditions: To enable, set to MOTION or SCHEDULED
- FTP Server: Enter the FTP Server address
- Login ID: Enter the FTP Server login
- Password: Enter the FTP Server Password
- FTP Port: Enter the FTP Port

***Scheduled Recording Table:***

- Set the recording schedule type for each day of the week: OFF (to disable), ALL DAY, SCHEDULE 1 or SCHEDULE 2. Schedules 1 and 2 are configured directly below.

***Scheduled Recording Settings:***

- Schedule 1 and Schedule 2: Set the Start Time and End Time for your custom recording schedules.
- Recording Cycle: Set the length of the video clip. Values range between 2 seconds and 120 seconds (2 minutes)
- File Name: Set the default video file name
- Server Path: Set the FTP Server path, where the video recordings will be stored.

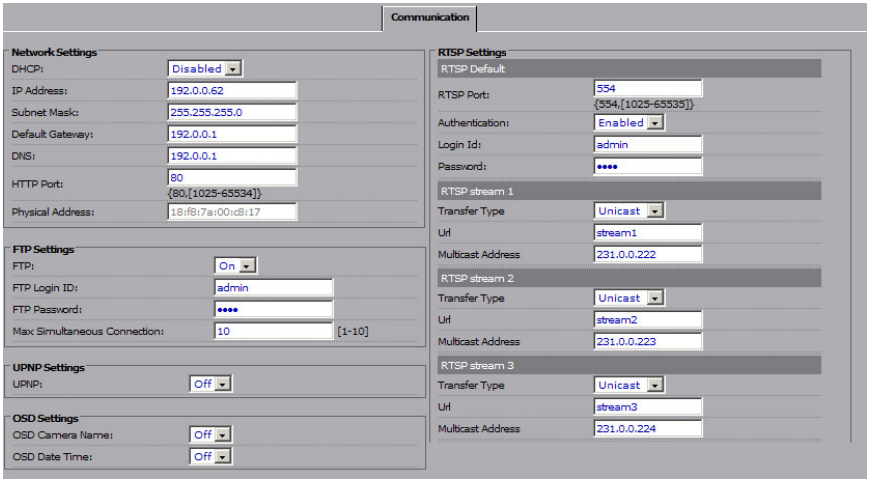
***Motion Recording Settings:***

- Motion Recording Cycle: Set the video recording length (in sec) preceeding the triggered motion. Values range between 1 and 30 seconds.
- Pre Recording Frame: Set the video frame rate for the video preceeding the triggered motion. Values range between 1 and 10 frames per second.
- Recording Cycle: Set the video recording length (in sec) that immediately follows the triggered motion. Values range between 2 seconds and 120 seconds (2 minutes)
- Recording Frame: Set the video frame rate for the video that immediately follows the triggered motion. Values range between 1 and 60 frames per second.
- File Name: Set the default video file name
- Server Path: Set the FTP Server path, where the video recordings will be stored.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

## 6.7 Communication Setup

The Communication tab is used to configure network and communication settings on the camera.



***Network settings:***

- DHCP: Enable or Disable to have the network automatically assign an IP address to the camera.
- IP Address: Manually enter the camera's IP address here.
  This option should NOT be used if DHCP is enabled.
- Subnet Mask: Manually enter the camera's Subnet Mask here.
  This option should NOT be used if DHCP is enabled.
- Default Gateway: Provide the IP address of the network's router if necessary.
  Contact your network administrator for this information.
- DNS: Specify a DNS if necessary.
  Contact your network administrator for this information.
- HTTP Port: Use the default Port 80 if possible. Contact your network administrator if the setting needs to be changed.
- Physical Address: This is the camera's unique MAC Address. It may not be changed.

***OSD Settings:***

- OSD Camera Name: Can be set to ON or OFF
- OSD Date Time: Can be set to ON or OFF

***RTSP Settings:***

- This area can be configured to allow users get the video stream using third party players, such as VLC with the help or RTSP protocol.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

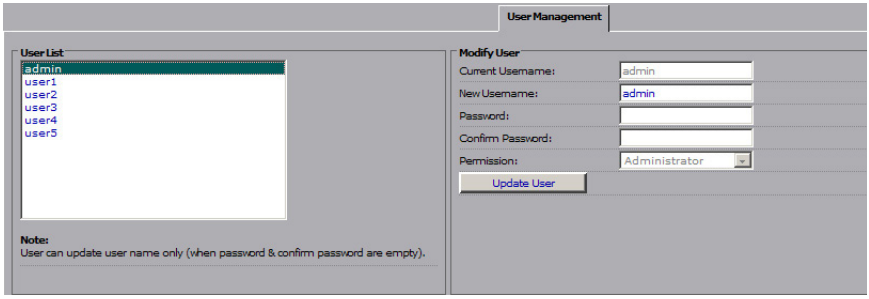
### 6.8 User Management

User Management tab displays the list of users that have access to the Annexxus camera. The username and password from this setup tab are used when connecting the camera to SRX-Pro Server.

**Reminder:** Whenever a change is made to the Annexxus camera user in the camera's Advanced Setup -> User Management tab, remember to update this information in the *IP Setup tab* of the SRX-Pro Server.

Two types of user permissions exist: **Aministrator** and **Viewer**. Administrator users have access to the camera's setup settings, while Viewer may only view camera live stream. Each camera has one master Administrator user (admin/i3admin) and five additional users that can be assigned either Administrator or Viewer priviliges.

**Note:** The accounts may not be deleted but the passwords and user names can be changed.



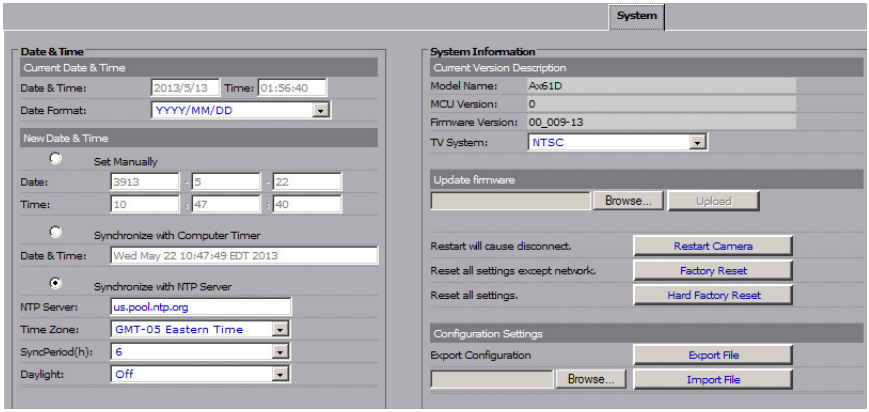

### 6.8.1 Modifying User Accounts

To change the password, user name or permissions type for one of the user accounts, follow instructions below:

1. Select user account in the User List on the left hand side.
2. To change user name, enter new user name in the New Username field in the Modify User area.
3. To change the account password, enter the new password in the *Password* field and *Confirm Password* fields of the Modify User area.
4. To change permission type, select either **Administrator** or **Viewer** in the *Permission* drop-down menu.
5. Click **Update User** button to apply changes.
6. Click **OK** in the confirmation message.

## 6.9 System Setup

In this section, you can configure basic camera system settings.




- Date & Time: Displays the camera's current date and time
- Date formats include: YYYY/MM/DD, MM/DD/YYYY and DD/MM/YYYY.
- New Date & Time: You may choose to...
  - » Set the Date and Time **Manually**
  - » Synchronize Date & Time with **Computer Time** or
  - » Synchronize Date & Time with **NTP Server**. NTP Server and Time Zone can be configured in the Communication Setup tab. *See section 6.3 for details.*

### *System Information:*

This section contains information on the Camera's Model Name and Firmware version. Change the Camera TV System between NTSC and PAL if it currently doesn't match your local standard.

### *Update Firmware:*

All Annexxus-series cameras are sold with the most recent version of the firmware already installed. If in the future firmware updates are released, you can update your camera's firmware by first downloading the firmware file from i3 International's website or FTP site. After downloading firmware file, click the **Browse...** button in the camera's System setup tab and locate the new firmware file. Then click the **Update** button and wait while the firmware is being updated on your camera.
**Note:** Be sure to stop all camera operations prior to an update. Do not turn off power or disconnect from the network during the process.
Click **Restart** Camera after you have updated firmware successfully.

***Restart/Reset:***

- Click **Restart Camera** to restart your Annexxus-series camera. This will cause a temporary disconnect, no video will be recorded while the camera is restarting but all custom settings will be saved. Camera restart is required after the firmware update. After clicking, a pop up will appear asking you to confirm. Click **Yes**.
- Click **Factory Reset** to return all settings, except for the Networking (IP) settings to factory defaults. After clicking, a pop up will appear asking you to confirm. Click **Yes**.
- Click **Hard Factory Reset** to return all camera settings, including IP address, to factory defaults. After clicking, a pop up will appear asking you to confirm. Click **Yes**.
  **Note:** Your Network Camera's default IP address is **192.0.0.16** and the default subnet mask address is **255.255.255.0**.

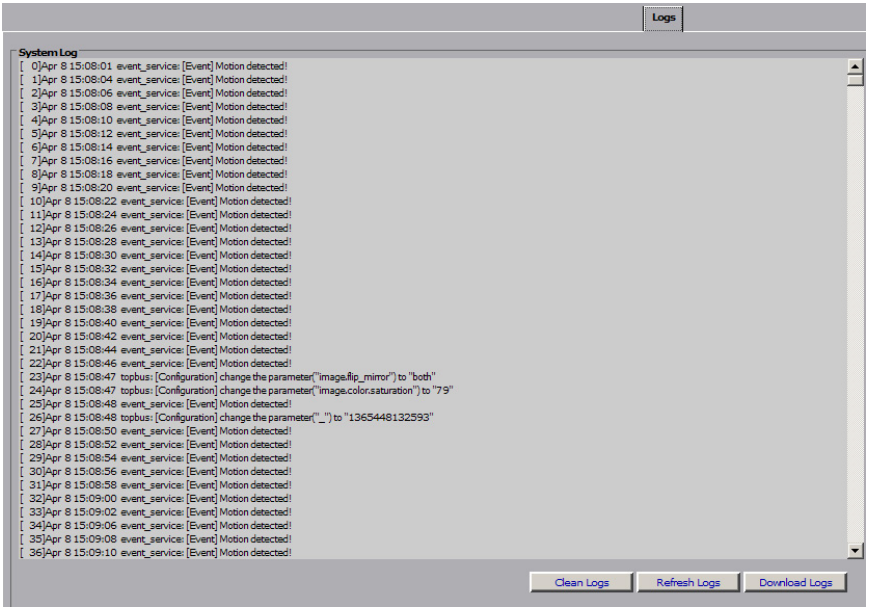
***Export Configuration:***

- Click **Export File** to export your camera's settings. If you have multiple cameras of the same model and you would like to apply a set of customer settings to each one, exporting the configuration file may save time.
- Click **Browse** to locate a configuration file to apply new settings to your camera and click **Import File**.

After making any setting adjustments, remember to click the **Save** button to save any changes made.

## 6.10 Logs

Logs setup tab displays all login and Alarms log records.


Logs
System Log
[ 0]Apr 8 15:08:01 event_service: [Event] Motion detected!
[ 1]Apr 8 15:08:04 event_service: [Event] Motion detected!
[ 2]Apr 8 15:08:06 event_service: [Event] Motion detected!
[ 3]Apr 8 15:08:08 event_service: [Event] Motion detected!
[ 4]Apr 8 15:08:10 event_service: [Event] Motion detected!
[ 5]Apr 8 15:08:12 event_service: [Event] Motion detected!
[ 6]Apr 8 15:08:14 event_service: [Event] Motion detected!
[ 7]Apr 8 15:08:16 event_service: [Event] Motion detected!
[ 8]Apr 8 15:08:18 event_service: [Event] Motion detected!
[ 9]Apr 8 15:08:20 event_service: [Event] Motion detected!
[ 10]Apr 8 15:08:22 event_service: [Event] Motion detected!
[ 11]Apr 8 15:08:24 event_service: [Event] Motion detected!
[ 12]Apr 8 15:08:26 event_service: [Event] Motion detected!
[ 13]Apr 8 15:08:28 event_service: [Event] Motion detected!
[ 14]Apr 8 15:08:30 event_service: [Event] Motion detected!
[ 15]Apr 8 15:08:32 event_service: [Event] Motion detected!
[ 16]Apr 8 15:08:34 event_service: [Event] Motion detected!
[ 17]Apr 8 15:08:36 event_service: [Event] Motion detected!
[ 18]Apr 8 15:08:38 event_service: [Event] Motion detected!
[ 19]Apr 8 15:08:40 event_service: [Event] Motion detected!
[ 20]Apr 8 15:08:42 event_service: [Event] Motion detected!
[ 21]Apr 8 15:08:44 event_service: [Event] Motion detected!
[ 22]Apr 8 15:08:46 event_service: [Event] Motion detected!
[ 23]Apr 8 15:08:47 topbus: [Configuration] change the parameter("image.flip_mirror") to "both"
[ 24]Apr 8 15:08:47 topbus: [Configuration] change the parameter("image.color.saturation") to "79"
[ 25]Apr 8 15:08:48 event_service: [Event] Motion detected!
[ 26]Apr 8 15:08:48 topbus: [Configuration] change the parameter("_") to "1365448132593"
[ 27]Apr 8 15:08:50 event_service: [Event] Motion detected!
[ 28]Apr 8 15:08:52 event_service: [Event] Motion detected!
[ 29]Apr 8 15:08:54 event_service: [Event] Motion detected!
[ 30]Apr 8 15:08:56 event_service: [Event] Motion detected!
[ 31]Apr 8 15:08:58 event_service: [Event] Motion detected!
[ 32]Apr 8 15:09:00 event_service: [Event] Motion detected!
[ 33]Apr 8 15:09:02 event_service: [Event] Motion detected!
[ 34]Apr 8 15:09:06 event_service: [Event] Motion detected!
[ 35]Apr 8 15:09:08 event_service: [Event] Motion detected!
[ 36]Apr 8 15:09:10 event_service: [Event] Motion detected!
Clean Logs
Refresh Logs
Download Logs

# 7. Specifications

| Features/Model | Ax61D2/4/8 | Ax62D | Ax62V |
|---|---|---|---|
| **Image System** | | | |
| Image Sensor | CMOS 1/3" AR0330 | | |
| Video Streaming and Compression Method | Triple Streaming: H.264 / Motion JPEG | | |
| Maximum Framerate vs Resolution | NTSC : 1080P (1920x1080) @ 30 fps ; 3M (2048x1536) @ 15 fps<br>PAL : 1080P (1920x1080) @ 25 fps ; 3M (2048x1536) @ 12 fps | | |
| Resolutions | QXGA(2048x1536), 2304x1296,<br>1080P(1920x1080), SXGA(1280x960), 720P(1280x720), SVGA(800x600), VGA(640x480),<br>D1(NTSC:720x480 / PAL:720x576),<br>4CIF(NTSC: 704x480 / PAL: 704x576),<br>CIF(NTSC: 352x240 / PAL: 352x288) | | |
| Lens | Built-in fixed lens<br>F2.0, f=2.8mm/ F1.8, f=4.2mm/<br>F1.8, f=8.0mm | F1.2 ~ 2.1, f=3 ~ 9mm | |
| View Angle | V:58°, H:104°/ V:38°, H:71°/ V:20°,<br>H:36° | V: 19° (Tele) ~ 52° (Wide) / H: 33° (Tele) ~ 96° (Wide) | |
| Day/Night Mode | Digital D/N | Mechanical ICR | |
| Auto Iris Control | N/A | DC Iris | |
| **Electric** | | | |
| Shutter Time | 1/30 ~ 1/8000 sec. (NTSC); 1/25 ~ 1/8000 sec. (PAL) | | |
| Minimum Illumination | 0.25Lux / 0.2Lux / 0.2Lux | F:1.2, CL: 0.4 lux / BW: 0.2 lux @ 50 IRE | |
| S/N ratio | 50dB (AGC off) | | |
| Gain control | Off/ On, selectable | | |
| White balance | ATW(2800K ~ 8500K) /Manual | | |
| Image Enhancements | Backlight Compensation: Off / On (6 Area selectable); Exposure Mode: Auto/Manual; Sharpness, Saturation, Brightness, Contrast, Hue; Noise Reduction; WDR: Digital WDR. Off/High/Mid/Low; Digital Noise Reduction: 3D | | |

*The specifications are subjects to be change without notice*

# 7. Specifications (cont.)

| | | | |
|---|---|---|---|
| **Other Features** | | | |
| Privacy Zone | Yes | | |
| Gamma correction | 0.45 | | |
| Motion Detection | Yes | | |
| Image Orientation | Mirror, Flip | | |
| Other | System Log, FTP Record, Email Notification, User Management | | |
| **Network Specifications** | | | |
| Network protocols | IPv4, HTTP/HTTPS, TCP, RTSP/RTCP/RTP, ICMP, UDP, IGMP, DNS, DHCP, ARP, NTP, SNMP, UPnP, SMTP | | |
| Security Access | Two user access levels with password protection. 1 Administrator, 5 Viewers | | |
| Web browsing requirements | Internet Explorer 8.0 or above | | |
| **Mechanism** | | | |
| Dimensions | ø140 mm x 132 mm (ø5½" x 5¼") | | |
| Weight | approx. 632g (1.39 lb) | approx. 1074g (2.36 lb) | |
| Connectors | Network: RJ45 (Female) w/ Network LED indicator; Buttons: Reset, Default (On top); Video output Switch (On Top) | | |
| Video Port/Output | 1 x Inside Service Port with 2 pin connector, 1.0Vp-p, 75Ω<br>1 x BNC Output, 1.0Vp-p, 75Ω | | |
| **Power Supply** | | | |
| Power Requirement | PoE IEEE 802.3af Class 0 | | |
| Power Consumption (max.) | 7.0W | | |
| **Environment** | | | |
| Operating temperature | -10ºC ~ 50ºC (14ºF ~ 122ºF ) | | |
| **Operating humidity** | 10 ~ 90% RH | | |
| **Storage temperature** | -20ºC ~ 60ºC (-4ºF ~ 140 ºF) | | |
| **Storage humidity** | 90%, non-condensing | | |
| **Regulations, Ratings** | CE/FCC Class B, ONVIF | CE/FCC Class B, ONVIF | CE/FCC Class B, ONVIF, IP67 |

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